



THE NAVAJO NATION

P.O. DRAWER 308

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PETERSON ZAH
PRESIDENT

MARSHALL PLUMMER
VICE PRESIDENT

F A C S I M I L E

R E Q U E S T / T R A N S M I S S I O N

DATE: AUG 26, 1991

Facsimile Number being sent to: 415 744-1966

ATTENTION: ROBERT BORNSTEIN

COMPANY: ERB (H-8-3)

USEPA REGION 9

ORIGINATOR: JOANNE NIANYGOATIS

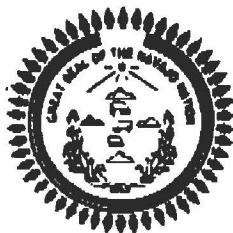
COMPANY: NAVAJO SUPERFUND PROGRAM

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FAX # (602) 871-7333



THE NAVAJO NATION

P.O. DRAWER 308

• WINDOW ROCK, ARIZONA 86515

• (602) 871-494

PETERSON ZAH
PRESIDENT

August 9, 1991

MARSHALL PLUMMEI
VICE PRESIDENT

Robert Bornstein, On-Scene Coordinator
Emergency Response Branch (H-8-3)
U.S. EPA Region 9
75 Hawthorne Street
San Francisco, CA 94105

Dear Mr. Bornstein:

We have reviewed the July 30, 1991 response letter by Mr. George Warnock, President of the Todilto Exploration and Development Corporation (Todilto), directed to Mr. William Weis of your branch. Here are some of the Navajo Superfund Program's (NSP) comments to Todilto's rebuttals.

- (1) Todilto claims they "are not a 'PRP'." This claim is quite unrealistic. The CERCLA definition of a potentially responsible party includes, amongst other persons, the current and former owners or operators of a site. At the very least, Todilto is a known past operator of mines in Sections 13 and 19. Todilto's boast that they are not a PRP makes us wonder if they are attempting to shield themselves from responsibility for clean-up by masquerading as the U.S. Government (Department of Energy).
- (2) Todilto claims that "there is no danger to the public health on either section 19 or 13." Their claims are based on the fact that they did not find "high" readings in these sections. Their discrepancies in the gamma readings are discussed more fully in our next comment. It appears that they are concerned primarily with the levels described in the action plan as requiring an immediate response. Todilto should realize that the remedial process (and the Hazard Ranking System) considers radionuclides at a site to be a hazard to public health if the gamma levels are more than three times the background. If you refer to Station 25 (upgradient of the piles) and Station 23 (downgradient of the piles) in Section 2 of the Brown Vandever site, from our November sampling efforts, (Figure 6 in your report), you will notice the following: the levels of Ra(226) are 5 times greater downgradient from the piles as compared to upgradient, the levels of U(233-4) are 6 times greater, and the levels of U(238) are 5.7 times greater. This is sufficient to establish an observed release from the site for the HRS. The drainage from this area leads directly into the property of Ruth Gaddy, whose house is located about thirty feet from the drainage. The drainage, in fact,

-2-

divides her house from her sheep corral. The gamma levels in this drainage within 200 feet of her house are several times greater than the background. Again, under the HRS this leads to a substantial soil exposure hazard.

Todilto has also not realized that levels of radionuclides were measured in samples collected from areas of unrestricted access within sections 13 and 19. The levels of Ra(226) and U(233-4, 238) were of the order of several hundred pCi/g in many locations. As pointed out in the risk assessment calculations of Sharon Seidel, Toxicologist, U.S. EPA, Region 9, and our own risk assessment, the excess cancer risk associated with the ingestion of such soil is very high. The risks from airborne particulates were calculated using AIRDOS, and for a lifetime exposure were also found to be substantial.

The high radon flux emanating from the waste is also quite conveniently forgotten by Todilto. At the Desiderio site we measured radon flux to be on average about 57 pCi/sq.m/s. At this location, the Ra(226) concentration was about 30 pCi/g. In the areas of the Brown Vandever site where the Ra(226) concentrations are much higher, we expect the radon fluxes to be even higher. These levels are definitely unsafe for nearby populations and a danger to public health.

In short, Todilto appears obsessed in disproving EPA's gammareadings when they fail to realize that other contaminants of concern (radium and radon) were measured at excessive concentrations.

- (3) Todilto claims that EPA's "high readings are not reproducible" due to two reasons: first, EPA's readings were taken with the detection instrument "actually resting on an ore grade fragment"; and, second, EPA was seeking out "highs" from 4"-6" size ore fragments. EPA's radiological survey involved collecting both waist level and contact readings. EPA also argued against going after highs settling instead for waist level average readings for specific survey points. As far as survey reproducibility, various factors will greatly enhance producing replicable survey readings. Such factors would include utilizing similar detection instrumentation (make, model, calibration source, etc.) and obtaining readings at/or near the same location points. Todilto has questioned EPA's survey. Yet, they do assert that there are radioactive ore fragments strewn about their mine claims.

-3-

- (4) Todilto claims that EPA's "exposure level of 180 (or 165 ?) uR/hr is grossly in error." There is no error in this calculation. This level is, in fact, purely for emergency response purposes. A complete remediation will try to reduce gamma levels even further.
- (5) Todilto claims, by the fact that a fence between Sections 13 and 18 was cut and rebuilt once a month, that the Vandever and their livestock were only on Section 13 once a month as they took their sheep and goats to and from Sections 10 and 11. This once-a-month site visit determination based on the frequency of fence repairs is farfetched. The livestock will not have just passed through Section 13 but will have grazed for longer periods of time than given credit for.
- (6) Todilto claims that during July 9-27 (20 days?) "there was no sighting of humans, animals, or their tracks on either section 19 or 13." Further, Todilto insists that EPA's 300-day a year and 2-hour per day time/use pattern estimate may be "valid" for Section 18 but is "completely wrong in the case of sections 19 and 13." Ever since the mines were assessed last year, the Vandever families were informed of the radiological and physical hazards associated with the mines. So one can deduce that the nearby residents have decreased their excursions on or near the mines. Also, the nearby residents are not likely to venture near the mines if people, appearing to be associated with the mine, are at the mine sites performing work. However, if no action is taken, the frequency of use of the areas will be bound to increase again.
- (7) Todilto calculates an exposure limit of 3,750 uR/hr, derived by dividing 90,000 rems/yr by (12 days/yr x 2 hours/day). Twenty-four hours of exposure per year is a grossly inaccurate estimate.
- (8) Todilto fictitiously states that doubling the exposure time to 4 hours would still result in an exposure limit of 1,875 uR/hr which cannot be obtained on either Sections 13 or 19, even if the detection instrument was placed directly on the ground. This argument is in error because the duration of exposure is grossly underestimated. In point of fact, some hot rocks do give readings as high as 2500 uR/hr.

Todilto also dredges up a conversation held with Brown Vandever. Todilto implies that Mr. Vandever is seeking to obtain a new house by "stirring up the IHS." Such prying on an elderly

-4-

person, who is obviously taking the brunt of the adverse impacts associated with the unreclaimed area mines, is totally uncalled for. Mr. Vandever is a victim of the effects caused by the unsafe mine conditions. And he is entitled to feel that he is due some sort of assistance. Any plans for accomodating affected families with new homes will be a matter for the Navajo Tribe to direct.

Finally, Todilto indicates they no longer have an interest in Section 19 but that they have a valid lease for the DOE portion of Section 13. Todilto portends legal action if access to their ore reserves in Section 13 are destroyed or blocked. At a previous meeting to discuss planned clean-up of the mines, a DOE representative proposed that any clean-up performed on their claims be done in ways to accomodate future mining activities. The DOE representative's proposal had been accepted and incorporated into EPA's planned emergency removal action.

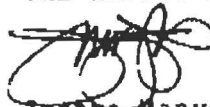
In closing, Navajo Superfund insists that Todilto is a PRP and that radiometric and analytical measurements obtained from the Brown and Na-nah-bah Vandever mine sites are well founded. In simple terms, the Agency for Toxic Substances and Disease Registry issued the health advisory for excessive radioactive emissions as well as physical hazards.

Thank you for your past assistance and continued support.

If you have any questions, please contact me at (602) 871-6284 or Dr. Gaurav Rajen at (602) 871-6861.

Sincerely,

THE NAVAJO NATION



Joanne Manygoats, Manager
Navajo Superfund Program
Division of Natural Resources

cc: Peterson Zah, President, Navajo Nation
Louise Linkin, Director, Navajo EPA
Anderson Morgan, Executive Director, Div. of Natural Resources
Sadie Hoskie, Office of the President
Charley John, Office of the President